

A. CLASSIFICATION OF SUBJECT MATTER
IPC 7 H03D13/00 H03L7/089

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)
IPC 7 H03L H03D

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

EPO-Internal , PAJ

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	US 5 712 580 A (BAUMGARTNER STEVEN JOHN ET AL) 27 January 1998 (1998-01-27) cited in the application column 2, line 34 – column 3, line 48; figure 1	1,8-10
A	US 2002/135400 A1 (LIU HUNG-CHIH ET AL) 26 September 2002 (2002-09-26) column 1, paragraph 7; figures 2,3 paragraph '0019! – paragraph '0025!	2-7
X	US 2001/031028 A1 (VAUCHER CICERO SILVEIRA) 18 October 2001 (2001-10-18) paragraphs '0024! – '0031!; figures 2-5a	1,8-10
A		2-7
		-/-

Further documents are listed in the continuation of box C.

Patent family members are listed in annex.

* Special categories of cited documents :

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- "Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art.
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Date of the actual completion of the international search

21 July 2004

Date of mailing of the international search report

28/07/2004

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C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category °	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	US 6 314 151 B1 (FUKAISHI MUNEO) 6 November 2001 (2001-11-06) column 3, line 46 – column 4, line 17; figure 4 -----	1-10
A	US 5 619 171 A (RIJCKAERT ALBERT M A ET AL) 8 April 1997 (1997-04-08) column 2, lines 42-64; figure 2 -----	1-10

Information on patent family members

International Application No

PCT/IB2004/050313

Patent document cited in search report		Publication date		Patent family member(s)		Publication date
US 5712580	A	27-01-1998	NONE			
US 2002135400	A1	26-09-2002	TW	474064 B		21-01-2002
US 2001031028	A1	18-10-2001	WO	0167612 A1		13-09-2001
			EP	1183781 A1		06-03-2002
			JP	2003526984 T		09-09-2003
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			WO	9610296 A1		04-04-1996